BREAKOUT SESSION - GROUP 2 SUMMARY

Moderator: Paul Elston - New York League of Conservation Voters
Rapporteur: Tom Butcher - Brookhaven National Laboratory

• Mr. Barry Durham	Reliant Energy, Inc.
• Mr. Gerald Tobin	Consolidated Edison Company of New York, Inc.
• Mr. Joseph Madia	Consolidated Edison Company of New York, Inc.
• Dr. Reggie A Blake	NYCDEP/New York City College of Technology/NASA-GISS
• Mr. John A Matousek	Lawler, Matusky & Skelly Engineers LLP
• Mr. Kenneth Neal	Entergy Nuclear Operations, Inc.
• Mr. Larry Wilson	New York State Department of Environmental Conservation (NYSDEC)
• Dr. William C Horak	Brookhaven National Laboratory
• Mr. Roy Jacobson	New York State Department of Environmental Conservation (NYSDEC)

The participants identified two over-riding trends in New York to frame the issues:

- Continuing growth in population and consumption
- Climate change
    - Reduced capacity to provide power and water
    - Increased demand for power and water
    - More carbon regulation
    - Increased saltwater intrusion

Water Issues:

- New York is relatively rich in water
- The water supply from the Hudson River provides for both emergency consumption and removal of waste.
- The trend in New York City toward using electric pumps instead of gravity flow to move water is increasing, raising questions of:
    - Interdependencies
    - Security issues
- New York City is vulnerable to occasional droughts
- Long Island relies presently on sole-source aquifers and could develop a future need for New York City water.

Electricity Issues:

- The New York City Study "An Electric Resource Roadmap" January 2004 concludes NYC will need another 2600MW in the next 5 years
    - How to pay for this new capacity?
    - How to cool new power plants?
    - How to anticipate impacts on water?

- Deregulation of electricity is relevant to energy-water issues because it complicates integrated planning
    - The new USEPA rule for implementing Paragraph 316 (b) of the Clean Water Act will require significant additional expenditures with respect to cooling thermoelectric power plants with potential decreases in power production efficiency.
    - Uncertain permit process = uncertainty = high risk
    - New cooling technologies carry an efficiency cost for power generation
- New York State Public Service Law - Article X
    - Promotes expedited power-plant siting
    - Intended to help overcome NIMBY issues

Ideas proposed:

- Promote increased conservation of water and electricity
    - More efficient use of electricity for wastewater treatment and pumping
    - Pricing incentives to encourage smart use of energy and water
- Examine idea of underground storage or other storage of water in wet times
- Explore increased use of non-potable water for some growth needs
    - Use effluent of sewage treatment for power-plant cooling
    - Examine ways to reuse gray water in buildings
- Adopt better regulatory incentives to encourage, not discourage, creation of an internet-based smart grid
- Conduct more research on the ecological impacts of Clean Water Act Regulation 316 (b), e.g. on fish populations